

WHAT IS CLAIMED IS:

1. A graphics card, comprising:  
a switch associated with the graphics card and  
communicatively coupled to a computer system, the switch  
operable to receive graphics data and data for a  
peripheral device from the computer system via a first  
link;  
the switch operable to route the data for a  
peripheral device to a console via a second link and to  
route the graphics data to a graphics controller via a  
third link; and  
the graphics controller forming a part of the  
graphics card and communicatively coupled to the switch  
via the third link, the graphics controller operable to  
generate a video signal to drive a video display.
2. The graphics card of Claim 1 further comprising  
the switch forming a part of the graphics controller.
3. The graphics card of Claim 1 wherein the video  
signal comprises a digital signal.
4. The graphics card of Claim 1 wherein the video  
signal comprises an analog signal.
5. The graphics card of Claim 1 further comprising  
a video memory disposed on the graphics card, the video  
memory communicatively coupled to a graphics controller  
to generate a video signal.

ATTORNEY DOCKET  
016295.1255  
(DC-03719)

PATENT APPLICATION

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6. The graphics card of Claim 1 wherein the first link, the second link, and the third link comprise high bandwidth links of a single interconnect.

7. A system for routing graphics data and data for a peripheral device in a computer system, the system comprising:

a processor;

5 a memory;

a first link communicatively connected between the memory and the processor, the first link operable to carry the graphics data and the data for the peripheral device; and

10 a graphics card coupled to the computer system, the graphics card comprising:

a first switch disposed on the graphics card and communicatively coupled to the computer system, the first switch operable to receive the graphics data and the data for the peripheral device from the computer system via the first link;

15 the first switch operable to route the data for the peripheral device to a second link and to route the graphics data to a third link; and

20 the graphics controller forming a part of the graphics card and communicatively coupled to the first switch via the third link, the graphics controller operable to receive the graphics data and generate a video signal to drive a video display.

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8. The system of Claim 7 further comprising an I/O hub device communicatively coupled to the first switch via the second link, wherein the I/O hub device receives the data for the peripheral device.

9. The system of Claim 8 further comprising a second switch forming a part of the I/O hub device in a console, the second switch operable to route the data for the peripheral device attached through an endpoint  
5 connection in the console via the I/O hub device.

10. The system of Claim 9 wherein the data for the peripheral device attached at the endpoint connection through other intermediate interfaces comprises data for  
10 a computer device, wherein the computer device is selected from a group consisting of a mouse, a keyboard, a speaker, a microphone, an optical drive, a magnetic drive, a camera, another switch, and a second input/output hub device.

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11. The system of Claim 7 further comprising an I/O hub device associated with the computer system, the I/O hub device including an endpoint connection, wherein the I/O hub device operable to receive data from the computer  
20 system via a computer system link.

12. The system of Claim 11 further comprising a hard disk drive coupled to the I/O hub device, wherein the I/O hub device is disposed in the computer system.

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13. The system of Claim 7 wherein the first link comprises high bandwidth interconnect.

14. A method of using a switch to route graphics data and data for a peripheral device on an interconnect, the method comprising:

receiving data at a switch coupled to a graphics  
5 card via a first link;

determining whether the data is the data for the peripheral device or the graphics data based on an address contained in the data; and

based on the determination, routing the graphics  
10 data to a second link and the data for the peripheral device to a third link.

15 15. The method of Claim 14 wherein the first link comprises a high bandwidth link of an interconnect architecture.

16. The method of Claim 14 further comprising:  
transmitting the graphics data to a graphics  
controller via the second link; and

20 generating a video signal operable to drive a video monitor based on the graphics data received at the graphics controller, wherein the video signal is sent to the video monitor via a video bus.

25 17. The method of Claim 16 wherein the video signal comprises a digital signal.

18. The method of Claim 16 wherein the video signal comprises an analog signal.

19. The method of Claim 14 further comprising transmitting the data for the peripheral device via the third link.

5        20. The method of Claim 14 wherein the data comprises a packet-based transaction.